AMENDMENTS TO THE CLAIMS

The following is a complete listing of the claims.

- 1-2. (Cancelled)
- 3. (Currently amended) The composition of claim 1 wherein the donor group comprises an oxygen atom conjugated with A, A composition comprising a fluorophore compound, the fluorophore compound having the chemical structure:

$$R^1$$
 D
 R^3
 R^4
 D
 R^4
 D
 R^4
 D
 R^3
 R^4

wherein:

D is a donor group comprising an oxygen atom conjugated with A;

A is a moiety having at least one multiple bond conjugated with the donor group and the 2-dicyanomethylen-3-cyano-2,5-dihydrofuran group;

R¹ is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

R² is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

 R^3 is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group; R^4 is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group; and

4. (Currently amended) The composition of claim 1, wherein the donor group comprises a sulfur atom conjugated with A A composition comprising a fluorophore compound, the fluorophore compound having the chemical structure:

wherein:

D is a donor group comprising a sulfur atom conjugated with A;

A is a moiety having at least one multiple bond conjugated with the donor group and the 2-dicyanomethylen-3-cyano-2,5-dihydrofuran group;

R¹ is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

R² is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

 R^3 is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group; R^4 is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group; and

the fluorophore compound is not DCDHF-6 (2-[3-Cyano-4-(4-dihexylamino-phenyl)-5,5-dimethyl-5H-furan-2-ylidene]-malononitrile; where A is a benzene ring, D is dihexylamine, R³ is methyl, and R⁴ is methyl).

5. (Currently amended) The composition of claim 1, wherein the donor group comprises a phosphorous atom conjugated with A A composition comprising a fluorophore compound, the fluorophore compound having the chemical structure:

$$R^1$$
 D
 R^3
 R^4
 D
 R^2
 R^3
 R^4
 R^4
 R^4
 R^4
 R^4
 R^4
 R^4

D is a donor group comprising a phosphorous atom conjugated with A;

A is a moiety having at least one multiple bond conjugated with the donor group and the 2-dicyanomethylen-3-cyano-2,5-dihydrofuran group;

R¹ is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

R² is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

R³ is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

R⁴ is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

and

- 6-7. (Cancelled).
- 8. (Currently amended) The composition of claim 1, wherein A is thiophene, furan, pyrrole, imidazole, pyrazole, oxazole, thiazole, diazole, oxadiazole, or thiadiazole A composition comprising a fluorophore compound, the fluorophore compound having the chemical structure:

$$R^1$$
—D—A— R^3
 R^4
 R^4
 R^2
 R^3
 R^4
 R^4
 R^4
 R^4
 R^4
 R^4
 R^4
 R^4
 R^4
 R^4

D is a donor group having at least one free electron pair conjugated with A;

A is thiophene, furan, pyrrole, imidazole, pyrazole, oxazole, thiazole, diazole, oxadiazole, or thiadiazole;

R¹ is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

R² is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

R³ is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

R⁴ is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

and

- 9. (Cancelled).
- 10. (Currently amended) The composition of claim-1, wherein A comprises a tolane group A composition comprising a fluorophore compound, the fluorophore compound having the chemical structure:

$$R^1$$
—D—A— R^3
 R^4
 R^4
 R^2
 R^3
 R^4
 R^4

D is a donor group having at least one free electron pair conjugated with A;

A comprises a tolane group;

R¹ is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

R² is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

R³ is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group; R⁴ is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group; and

- 11. (Cancelled).
- 12. (Currently amended) The composition of claim 1, wherein the alkoxy alkyl group is methoxymethyl, methoxymethyl, ethoxymethyl, or ethoxyethyl A composition comprising a fluorophore compound, the fluorophore compound having the chemical structure:

$$R^1$$
—D—A— R^3
 R^4
 R^4
 R^2
 R^3
 R^4
 R^4

D is a donor group having at least one free electron pair conjugated with A;

A is a moiety having at least one multiple bond conjugated with the donor group and the 2-dicyanomethylen-3-cyano-2,5-dihydrofuran group;

R¹ is an alkyl group, aromatic group, substituted aromatic group, methoxymethyl, methoxymethyl, ethoxymethyl, ethoxymethyl or hydrogen;

R² is an alkyl group, aromatic group, substituted aromatic group, methoxymethyl, methoxymethyl, ethoxymethyl, ethoxymethyl or hydrogen;

 R^3 is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group; R^4 is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group; and

the fluorophore compound is not DCDHF-6 (2-[3-Cyano-4-(4-dihexylamino-phenyl)-5,5-dimethyl-5H-furan-2-ylidene]-malononitrile; where A is a benzene ring, D is dihexylamine, R³ is methyl, and R⁴ is methyl).

13. (Currently amended) The composition of claim 1, wherein the fluoroalkyl group is trifluoromethyl or pentafluoroethyl A composition comprising a fluorophore compound, the fluorophore compound having the chemical structure:

$$R^1$$
— D — A — CN
 R^1
 R^2
 R^3
 R^4
 R^4

- D is a donor group having at least one free electron pair conjugated with A;
- A is a moiety having at least one multiple bond conjugated with the donor group and the 2-dicyanomethylen-3-cyano-2,5-dihydrofuran group;
- R¹ is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;
- R² is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;
- R³ is an alkyl group, aromatic group, substituted aromatic group, trifluoromethyl or pentafluoroethyl;
- R⁴ is an alkyl group, aromatic group, substituted aromatic group, trifluoromethyl or pentafluoroethyl; and
- the fluorophore compound is not DCDHF-6 (2-[3-Cyano-4-(4-dihexylamino-phenyl)-5,5-dimethyl-5H-furan-2-ylidene]-malononitrile; where A is a benzene ring, D is dihexylamine, R³ is methyl, and R⁴ is methyl).

14-40. (Cancelled).